

## Unidyne XP-8003

is a fluorine-free oil and grease barrier for different fibrous substrates..

### Product Features

- Imparts a high oil and grease barrier to fibrous substrates
- Designed for external sizing applications, like size press and film press
- Does not alter optic, haptic and mechanical properties of substrates

### Physical Properties\*

<i>Appearance</i>	Milky white liquid
<i>Charge</i>	Cationic
<i>pH</i>	3,5 - 5,5
<i>Specific gravity at 25°C</i>	1,0 - 1,15 g/cm <sup>3</sup>
<i>Typical analysis</i>	20% solid content
<i>Solubility</i>	Miscible with water

\*The above physical properties are representative and not guaranteed.

### Storage / Shelf-life

- XP-8003 should be stored according to the Material Safety Data Sheet
- Storage temperature: 0°C to 30°C, avoid frost and freezing.
- When stored using the recommended conditions, shelf-life is eighteen (18) months from the production date

### Safety

Before using or disposing of this product, please read the current Material Safety Data Sheet and the precautionary statement on the product package.

Reference the Material Safety Data Sheet for details regarding the safe use and disposal of this product.

## Application Guide for external sizing

The product is meant to be used in slightly acidic process conditions. Please note that exceeding the recommended pH level can cause instability and flocculation of the product.

The product is typically used in size press / film press applications together with a suitable carrier starch.

### Application example for a size press:

- Base paper: 40 gsm, SW/HW mix, Gurley 300 s
- Carrier: Nonionic, low MW, thermally modified starch
- Sizing solution pH: 4,0 - 5,0 (adjusted with for example acetic acid)
- Sizing solution temperature: 50 °C
- Drying: contact or hot air (95°C to 105°C)

<i>Trade product in solution</i>	<i>Starch solids in solution</i>	<i>3M KIT value</i>
4,0 %	14 %	4 - 5
7,0 %	14 %	6 - 7

Please note that the exact composition of the sizing solution depends on multiple factors and has to be calculated individually for each application. A low dosage of suitable defoamer is recommend to ascertain optimal processing conditions.

The application development laboratory of Daikin Chemical Europe can help you and recommend suitable carrier starches/defoamers for your specific application.

## Application Guide for external sizing

- **BfR XXXVI** (paper and board for food contact)

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